FIG. 1

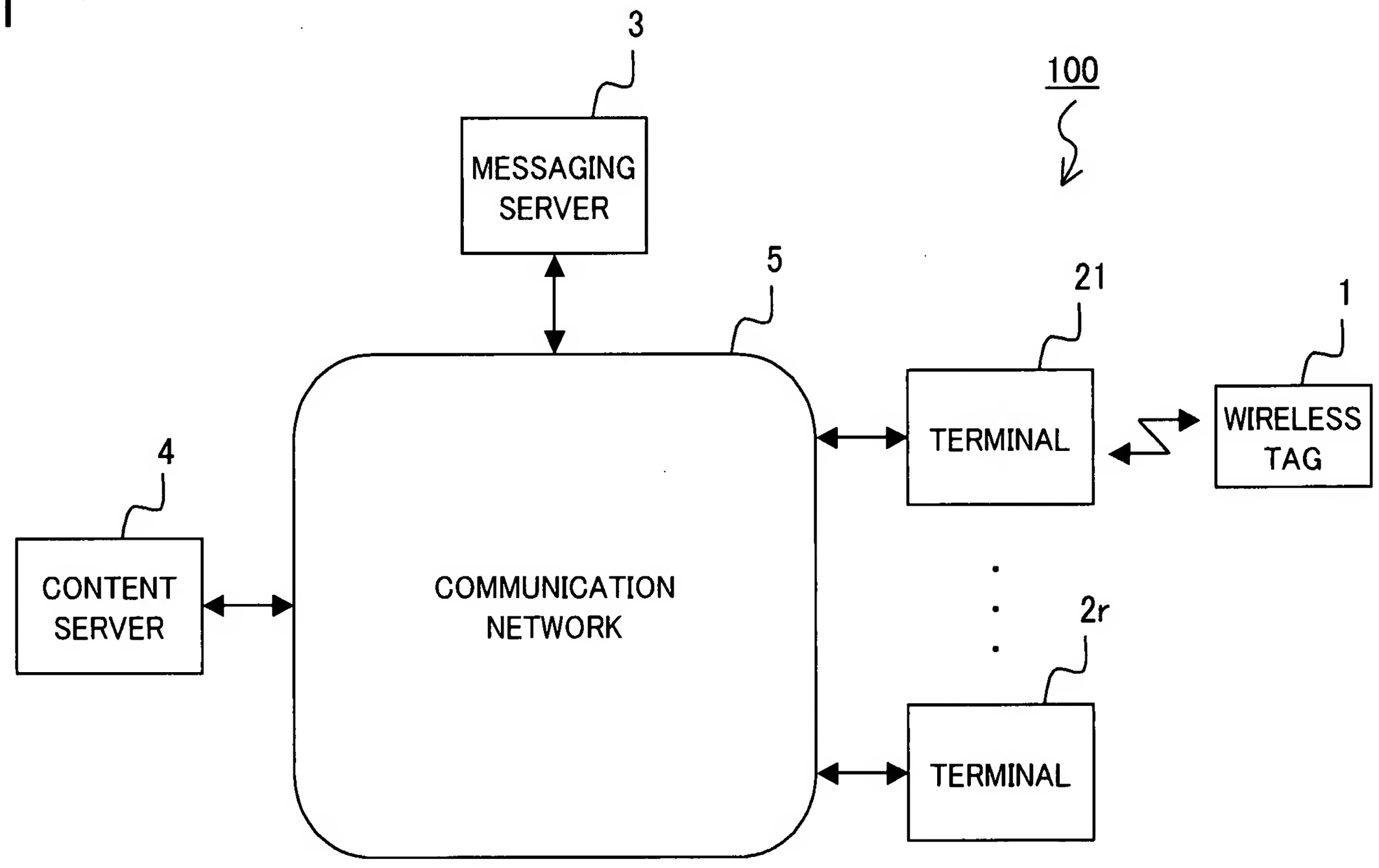

3
MESSAGING SERVER
100
5
21
1
TERMINAL
WIRELESS TAG
4
CONTENT SERVER
COMMUNICATION NETWORK
2r
TERMINAL

FIG. 2

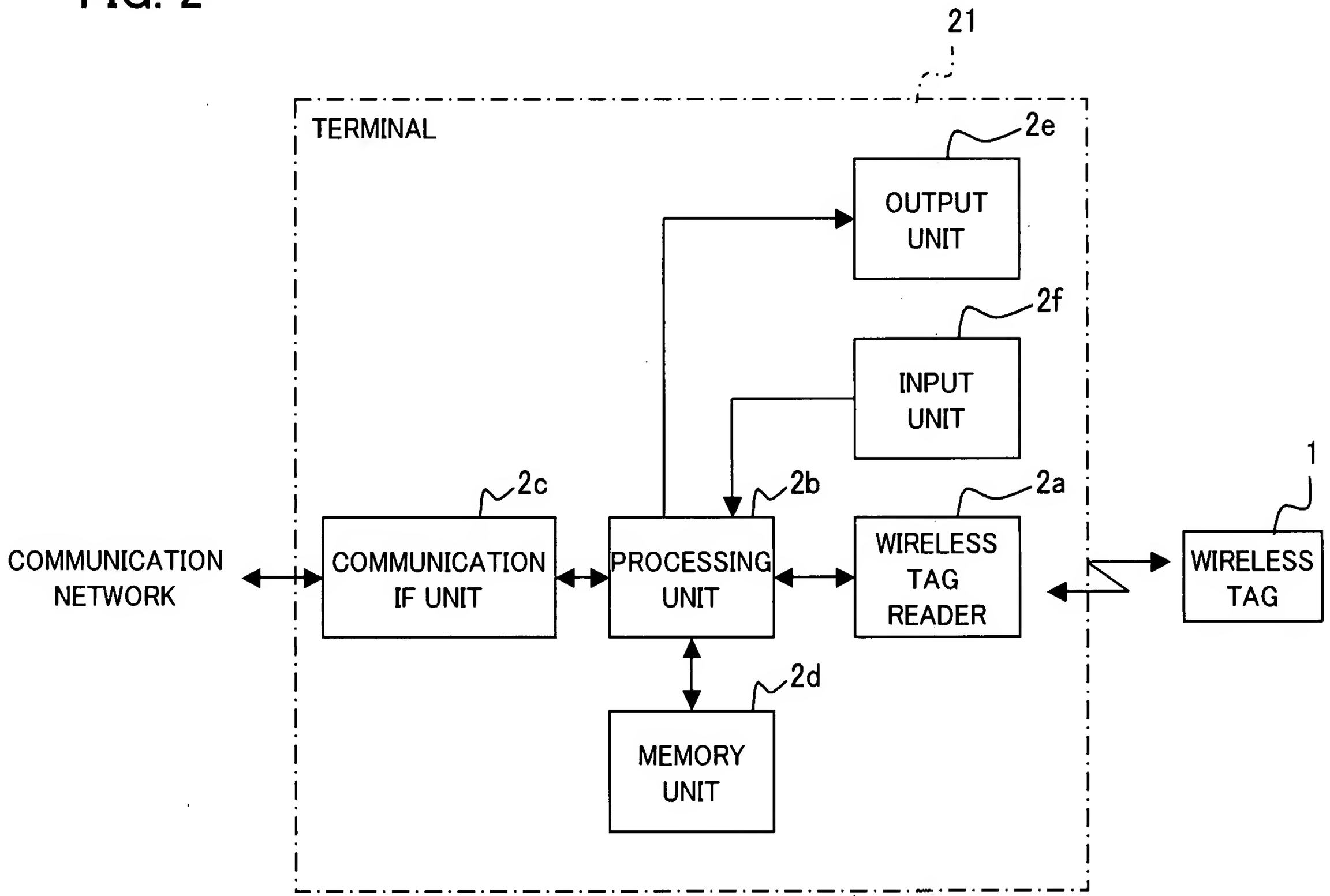

21
TERMINAL
2e
OUTPUT UNIT
2f
INPUT UNIT
2c
2b
2a
1
COMMUNICATION NETWORK
COMMUNICATION IF UNIT
PROCESSING UNIT
WIRELESS TAG READER
WIRELESS TAG
2d
MEMORY UNIT

FIG. 3

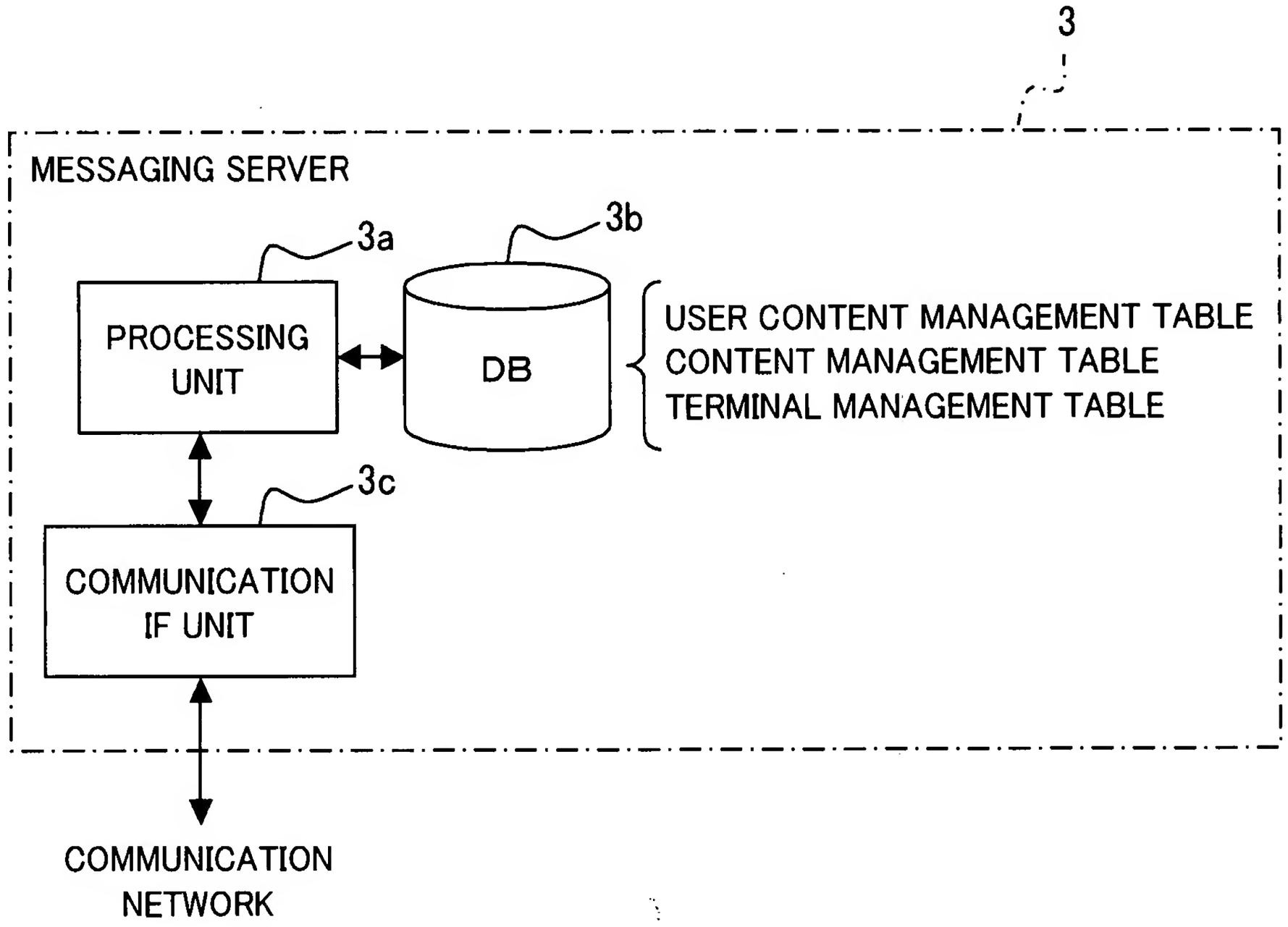

3
MESSAGING SERVER
3a
3b
PROCESSING UNIT
DB
USER CONTENT MANAGEMENT TABLE
CONTENT MANAGEMENT TABLE
TERMINAL MANAGEMENT TABLE
3c
COMMUNICATION IF UNIT
COMMUNICATION NETWORK

FIG. 4A

USER ID: USER A

CONTENT ADDRESS (URL)	DELIVERY MODE	DELIVERY TRIGGER	UPDATED TIME	DELIVERY CONDITION	DELIVERY COUNT
http://www.stock.com/z.html	SINGLE	UPDATE		—	0
.	.	.	.	.	.
.	.	.	.	.	.
.	.	.	.	.	.

FIG. 4B

USER ID: USER A

CONTENT ADDRESS (URL)	DELIVERY MODE	DELIVERY TRIGGER	UPDATED TIME	DELIVERY CONDITION	DELIVERY COUNT
http://www.stock.com/z.html	SINGLE	UPDATE	2002.07.01 13:00	—	1
.	.	.	.	.	.
.	.	.	.	.	.
.	.	.	.	.	.

FIG. 5A

CONTENT ADDRESS (URL)	UPDATE TIME SLOT	FILE NAME
http://www.stock.com/z.html	9:00～15:00	stock/z.html
⋮	⋮	⋮

FIG. 5B

CONTENT ADDRESS (URL)	UPDATE TIME SLOT	FILE NAME
http://www.stock.com/z.html	9:00～15:00	stock/z.html
		stock/z.txt
⋮	⋮	⋮

FIG. 6A

USER ID: USER A

TERMIANL ID	TERMINAL ADDRESS	CONTENT FORMAT
T1	A1	TEXT

FIG. 6B

USER ID: USER A

TERMIANL ID	TERMINAL ADDRESS	CONTENT FORMAT
T1	A1´	TEXT

FIG. 7

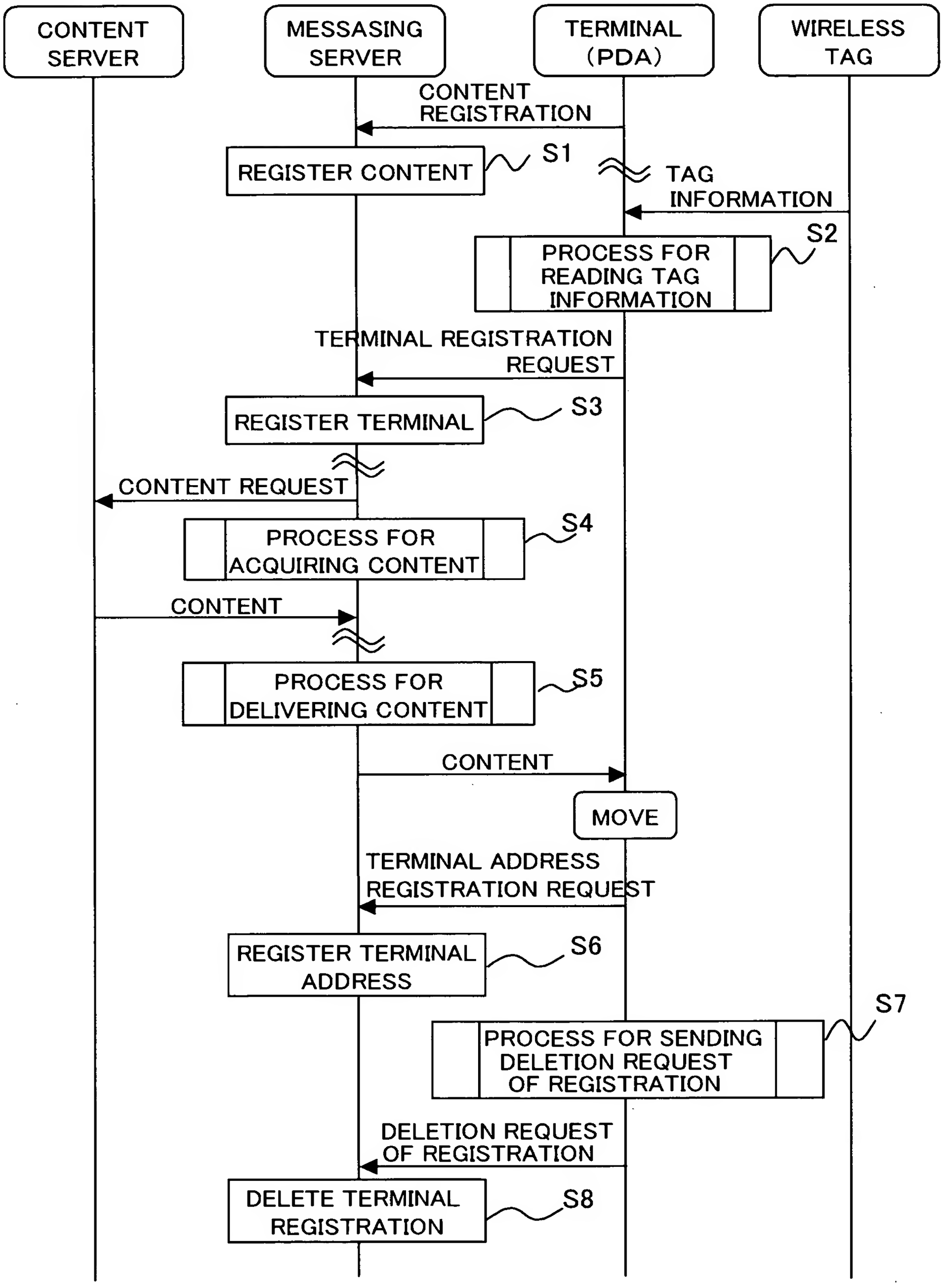

CONTENT SERVER
MESSASING SERVER
TERMINAL (PDA)
WIRELESS TAG
CONTENT REGISTRATION
REGISTER CONTENT
S1
TAG INFORMATION
S2
PROCESS FOR READING TAG INFORMATION
TERMINAL REGISTRATION REQUEST
REGISTER TERMINAL
S3
CONTENT REQUEST
PROCESS FOR ACQUIRING CONTENT
S4
CONTENT
PROCESS FOR DELIVERING CONTENT
S5
CONTENT
MOVE
TERMINAL ADDRESS REGISTRATION REQUEST
REGISTER TERMINAL ADDRESS
S6
S7
PROCESS FOR SENDING DELETION REQUEST OF REGISTRATION
DELETION REQUEST OF REGISTRATION
DELETE TERMINAL REGISTRATION
S8

FIG. 8

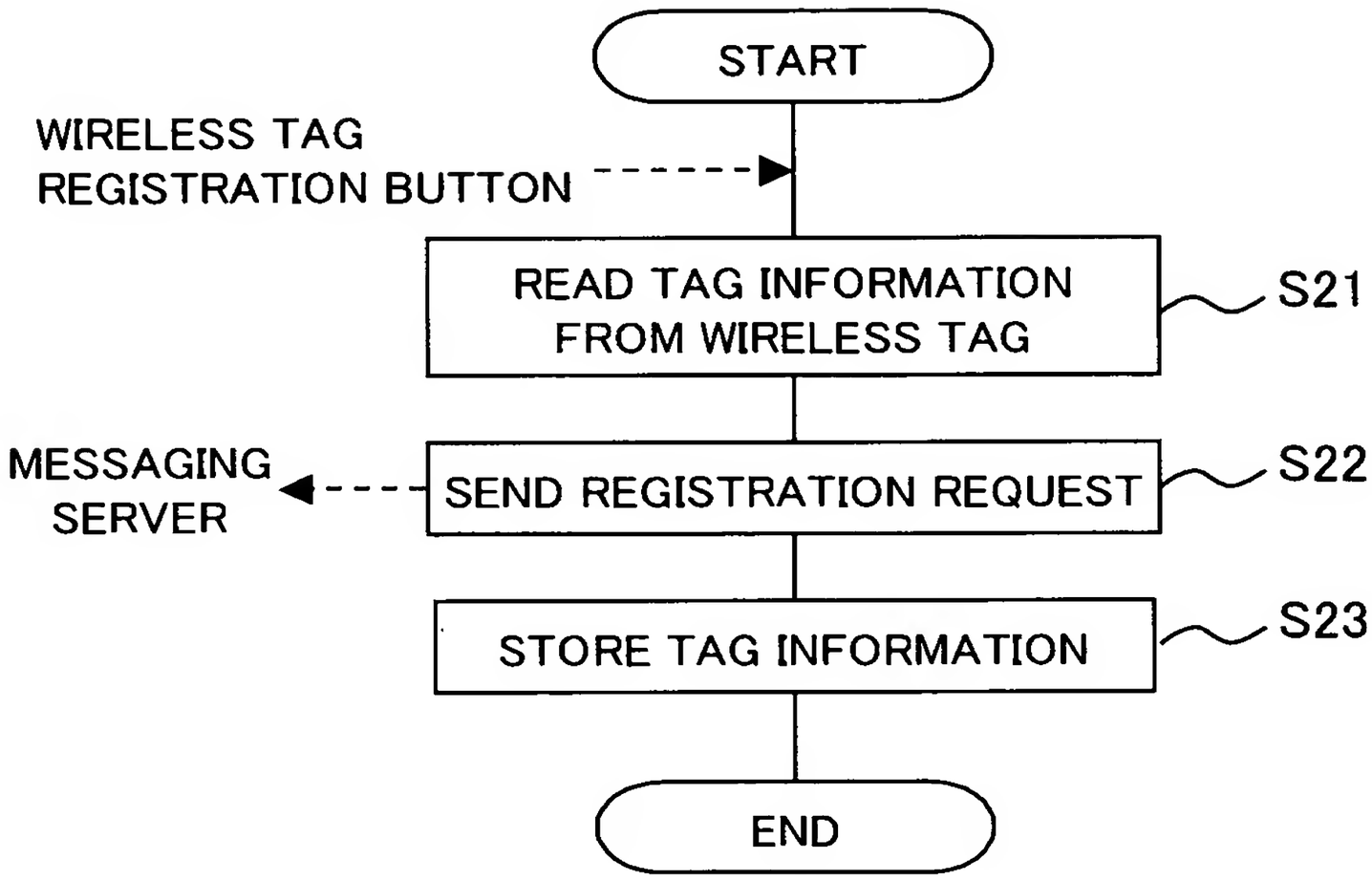

START
WIRELESS TAG
REGISTRATION BUTTON
READ TAG INFORMATION
FROM WIRELESS TAG
S21
MESSAGING
SERVER
SEND REGISTRATION REQUEST
S22
STORE TAG INFORMATION
S23
END

FIG. 9

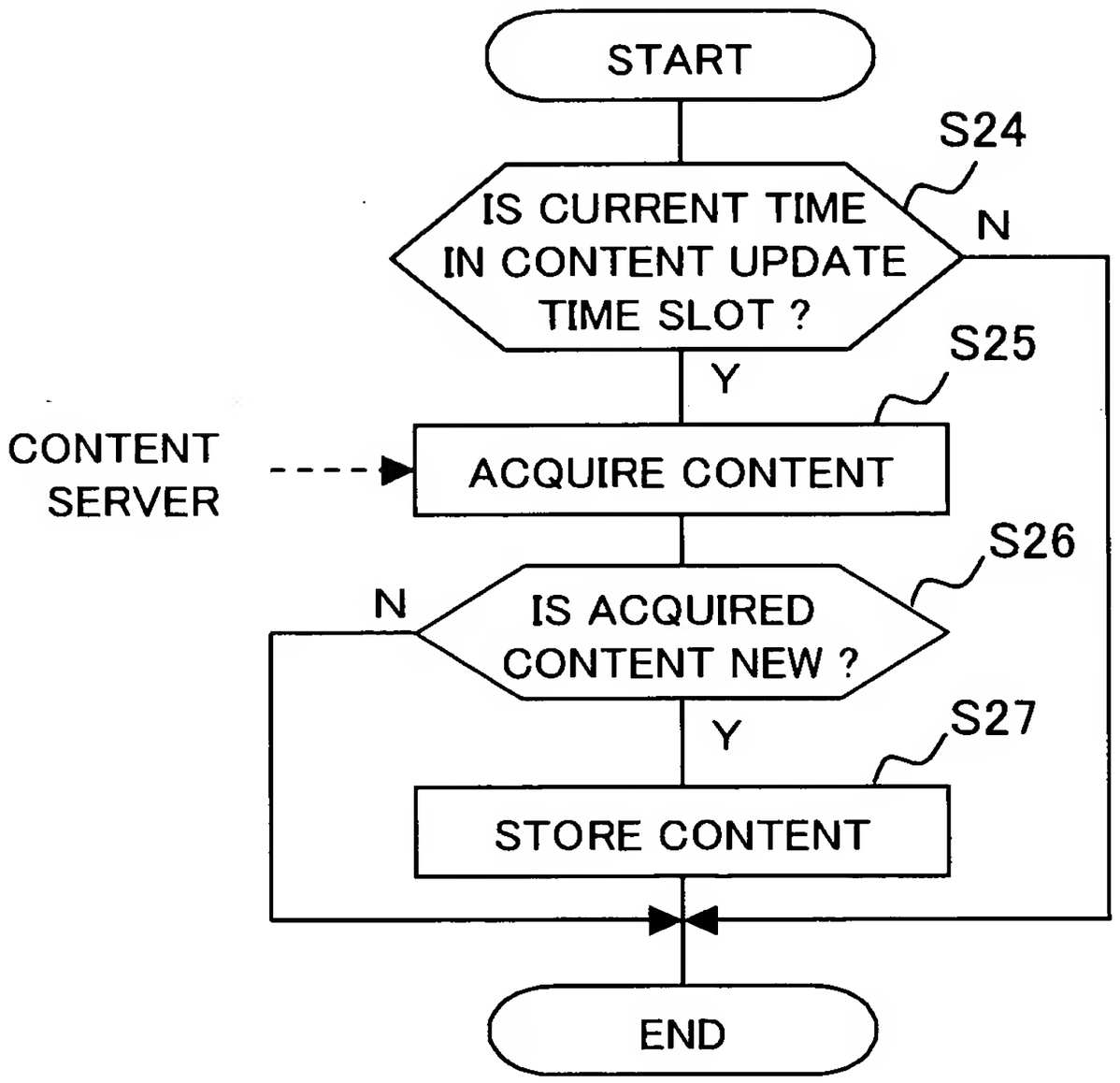

START
S24
IS CURRENT TIME IN CONTENT UPDATE TIME SLOT ?
N
Y
S25
CONTENT SERVER
ACQUIRE CONTENT
S26
N
IS ACQUIRED CONTENT NEW ?
Y
S27
STORE CONTENT
END

FIG. 10

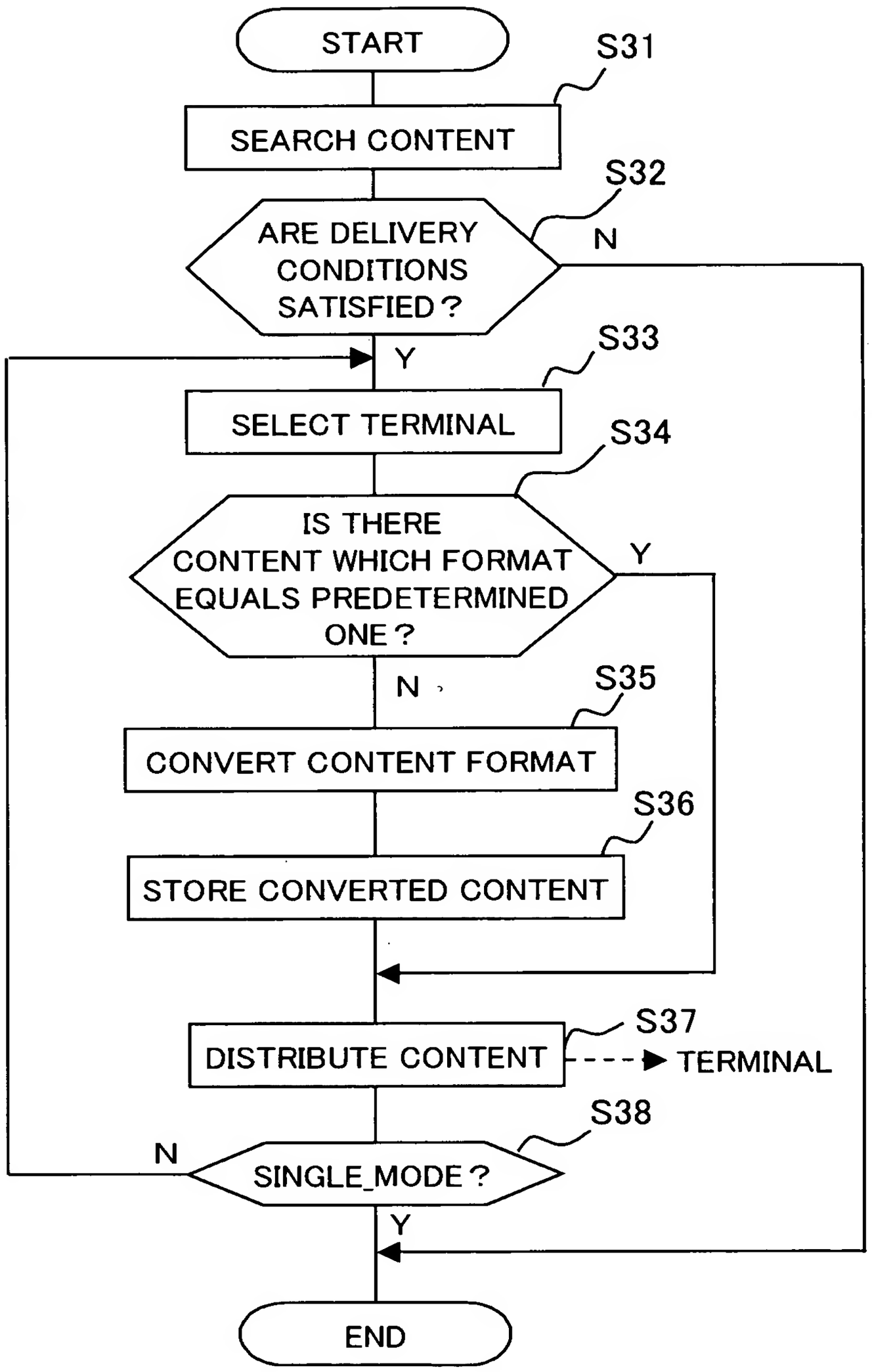

START
S31
SEARCH CONTENT
S32
ARE DELIVERY CONDITIONS SATISFIED?
N
Y
S33
SELECT TERMINAL
S34
IS THERE CONTENT WHICH FORMAT EQUALS PREDETERMINED ONE?
Y
N
S35
CONVERT CONTENT FORMAT
S36
STORE CONVERTED CONTENT
S37
DISTRIBUTE CONTENT
TERMINAL
S38
N
SINGLE_MODE?
Y
END

FIG. 11

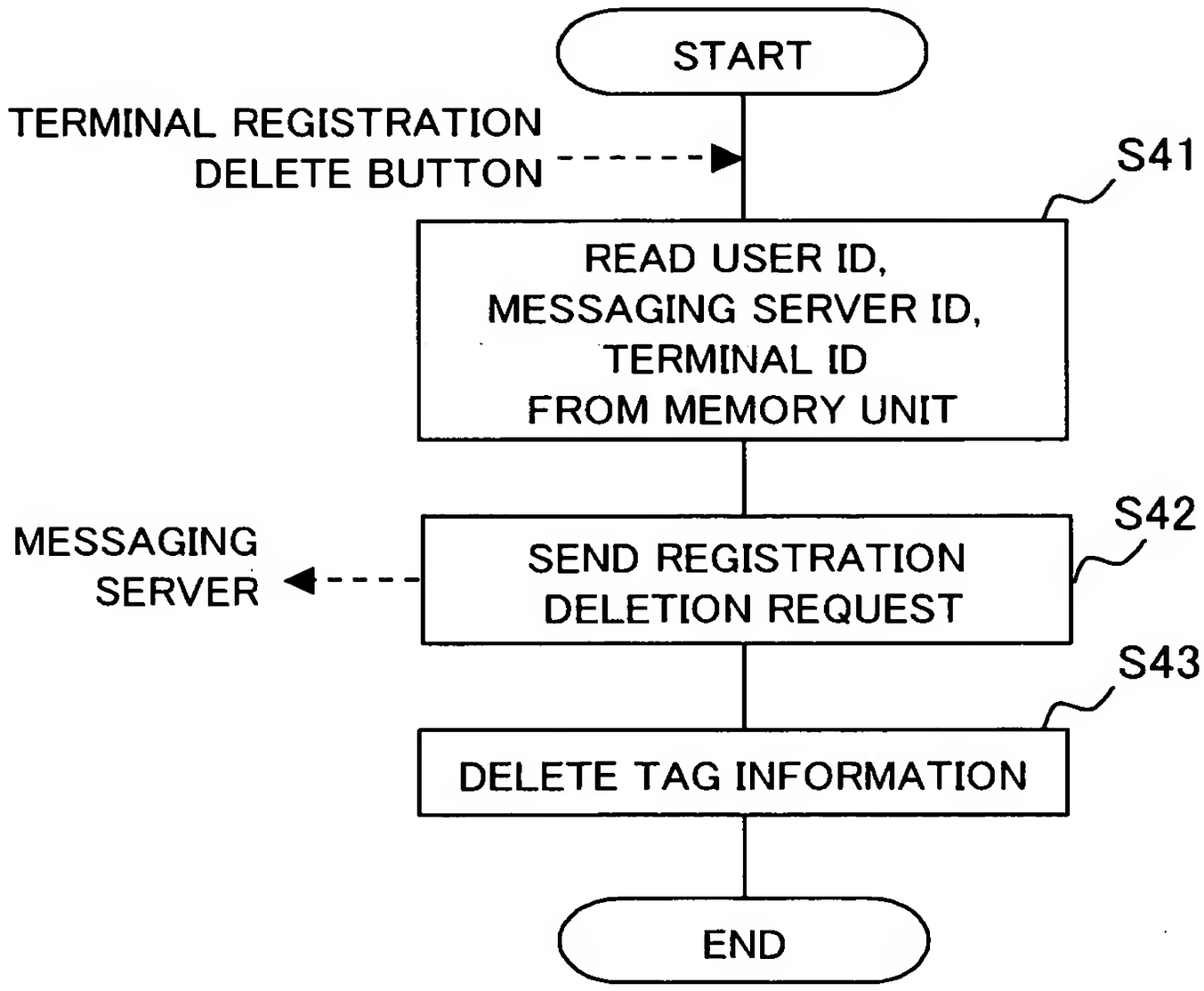

START
TERMINAL REGISTRATION DELETE BUTTON
S41
READ USER ID, MESSAGING SERVER ID, TERMINAL ID FROM MEMORY UNIT
MESSAGING SERVER
S42
SEND REGISTRATION DELETION REQUEST
S43
DELETE TAG INFORMATION
END

FIG. 12

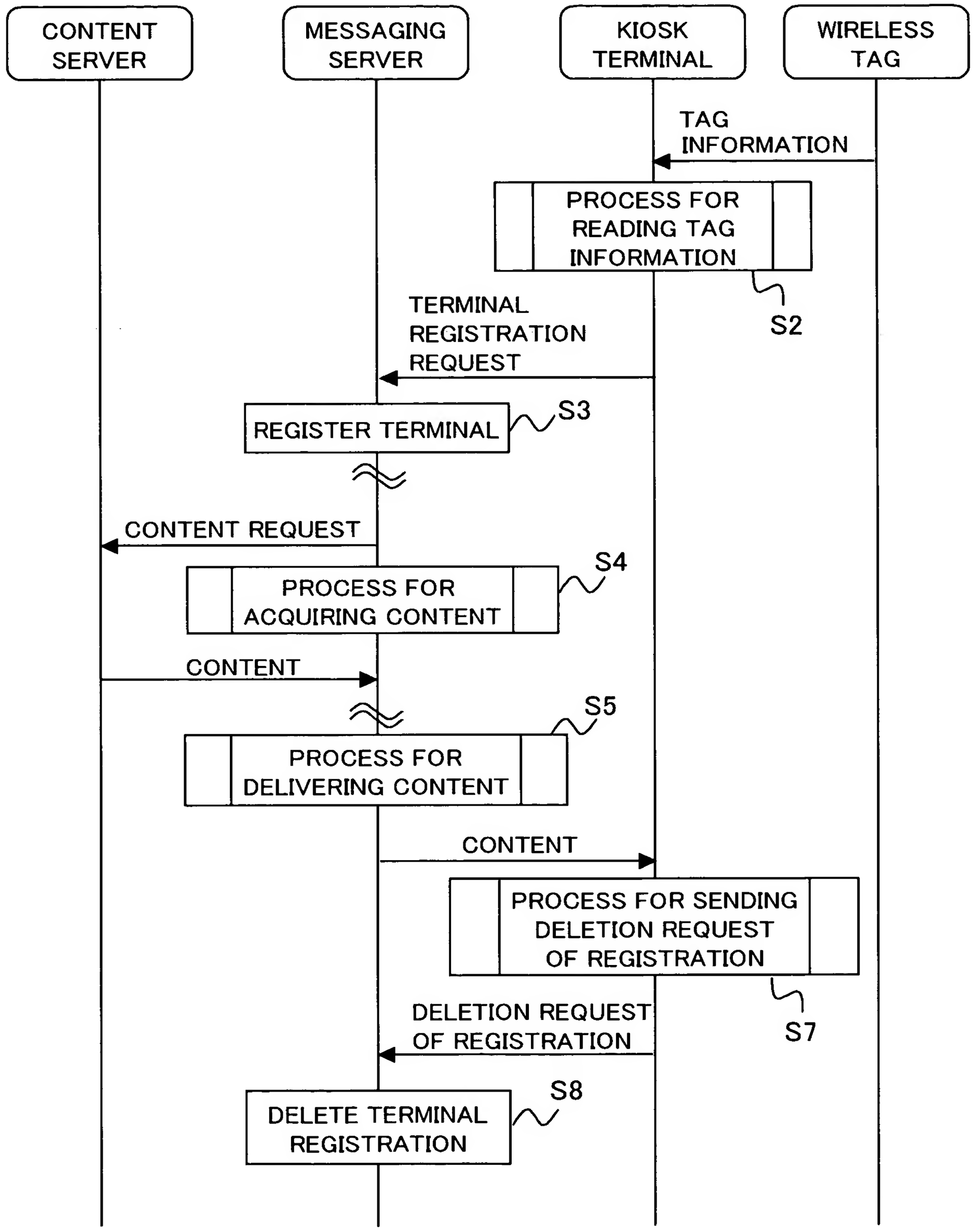

CONTENT SERVER
MESSAGING SERVER
KIOSK TERMINAL
WIRELESS TAG
TAG INFORMATION
PROCESS FOR READING TAG INFORMATION
S2
TERMINAL REGISTRATION REQUEST
REGISTER TERMINAL
S3
CONTENT REQUEST
PROCESS FOR ACQUIRING CONTENT
S4
CONTENT
PROCESS FOR DELIVERING CONTENT
S5
CONTENT
PROCESS FOR SENDING DELETION REQUEST OF REGISTRATION
S7
DELETION REQUEST OF REGISTRATION
DELETE TERMINAL REGISTRATION
S8

FIG. 13

USER ID: USER A

TERMIANL ID	TERMINAL ADDRESS	CONTENT FORMAT
T2	A2	HTML

FIG. 14

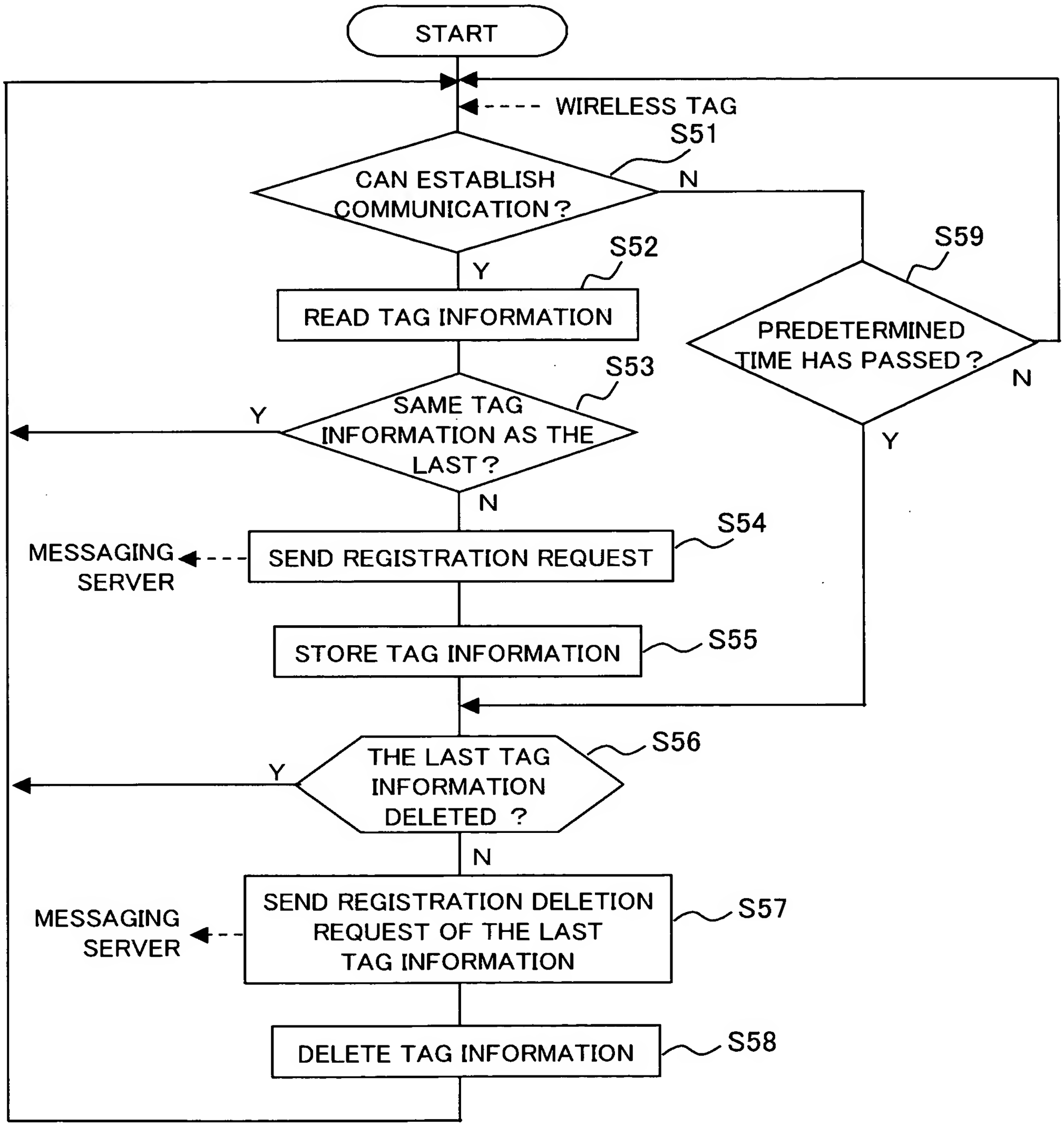

START
WIRELESS TAG
S51
CAN ESTABLISH COMMUNICATION?
N
Y
S52
READ TAG INFORMATION
S53
SAME TAG INFORMATION AS THE LAST?
Y
N
MESSAGING SERVER
S54
SEND REGISTRATION REQUEST
STORE TAG INFORMATION
S55
THE LAST TAG INFORMATION DELETED ?
S56
Y
N
MESSAGING SERVER
SEND REGISTRATION DELETION REQUEST OF THE LAST TAG INFORMATION
S57
DELETE TAG INFORMATION
S58
S59
PREDETERMINED TIME HAS PASSED?
N
Y

FIG. 15

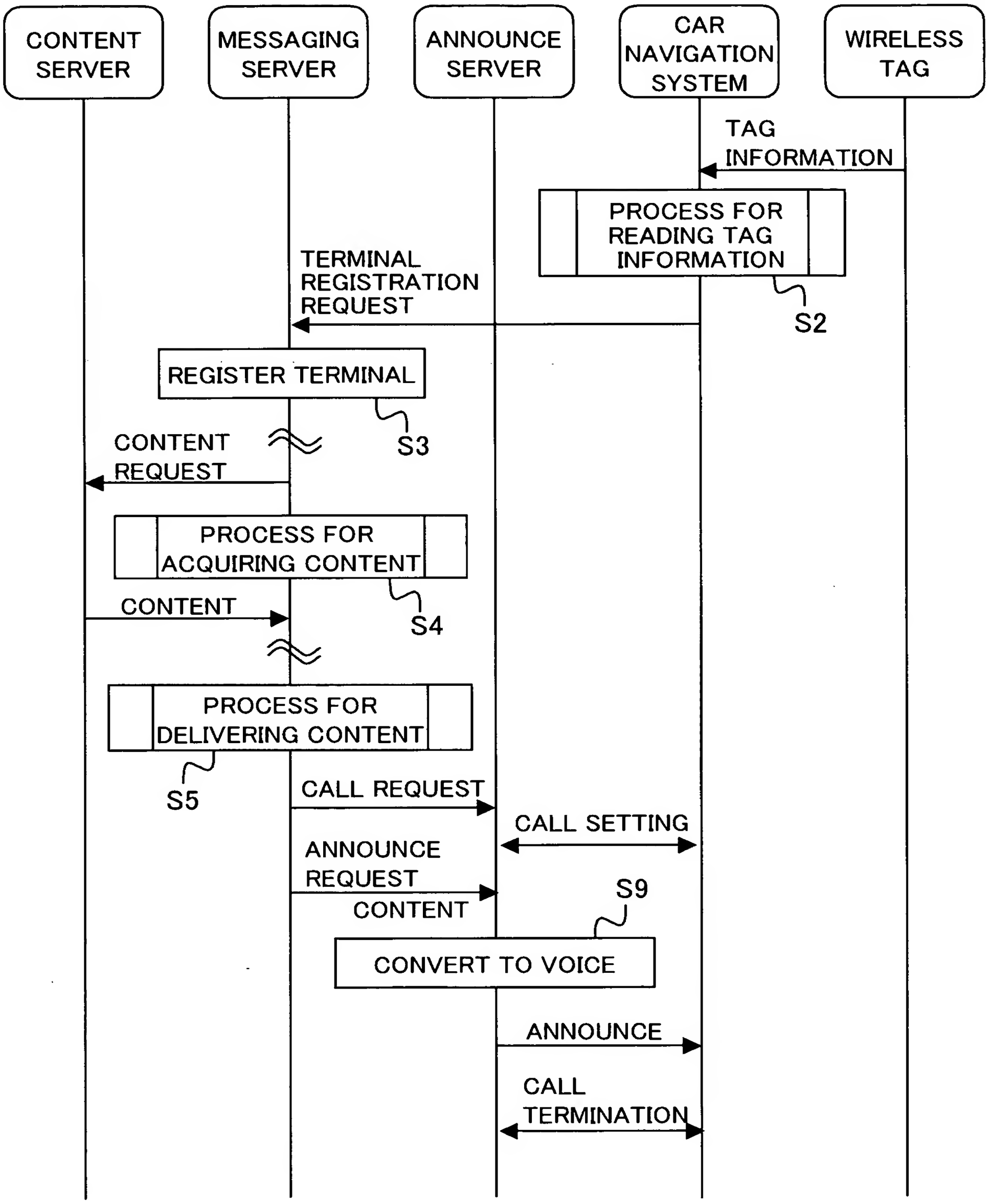

CONTENT SERVER
MESSAGING SERVER
ANNOUNCE SERVER
CAR NAVIGATION SYSTEM
WIRELESS TAG
TAG INFORMATION
PROCESS FOR READING TAG INFORMATION
S2
TERMINAL REGISTRATION REQUEST
REGISTER TERMINAL
S3
CONTENT REQUEST
PROCESS FOR ACQUIRING CONTENT
S4
CONTENT
PROCESS FOR DELIVERING CONTENT
S5
CALL REQUEST
CALL SETTING
ANNOUNCE REQUEST
CONTENT
S9
CONVERT TO VOICE
ANNOUNCE
CALL TERMINATION

FIG. 16

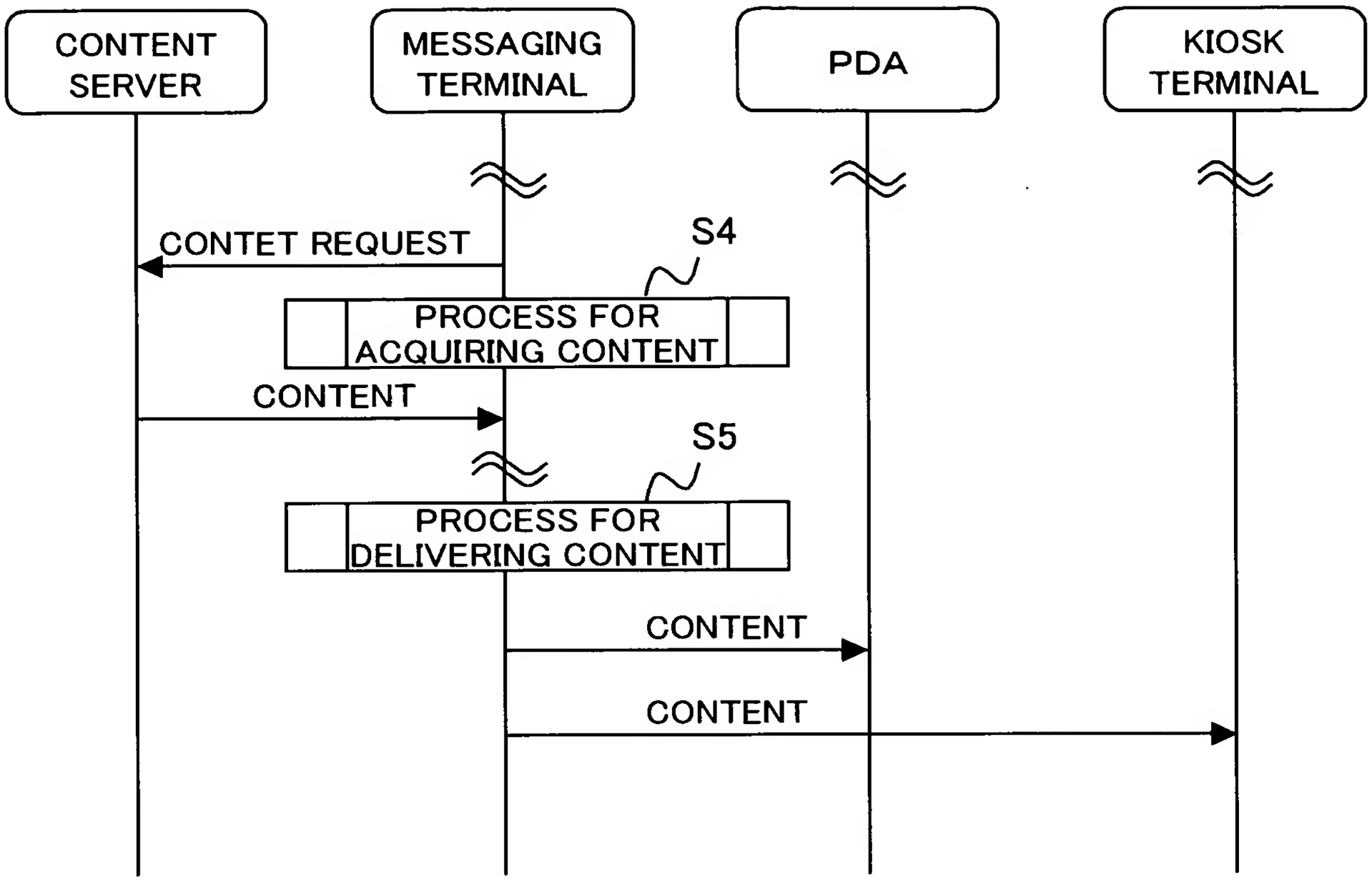


FIG. 17

USER ID: USER A		
TERMNAL ID	TERMINAL ADDRESS	CONTENT FORMAT
T1	A1	HTML
T2	A2	TEXT

FIG. 18

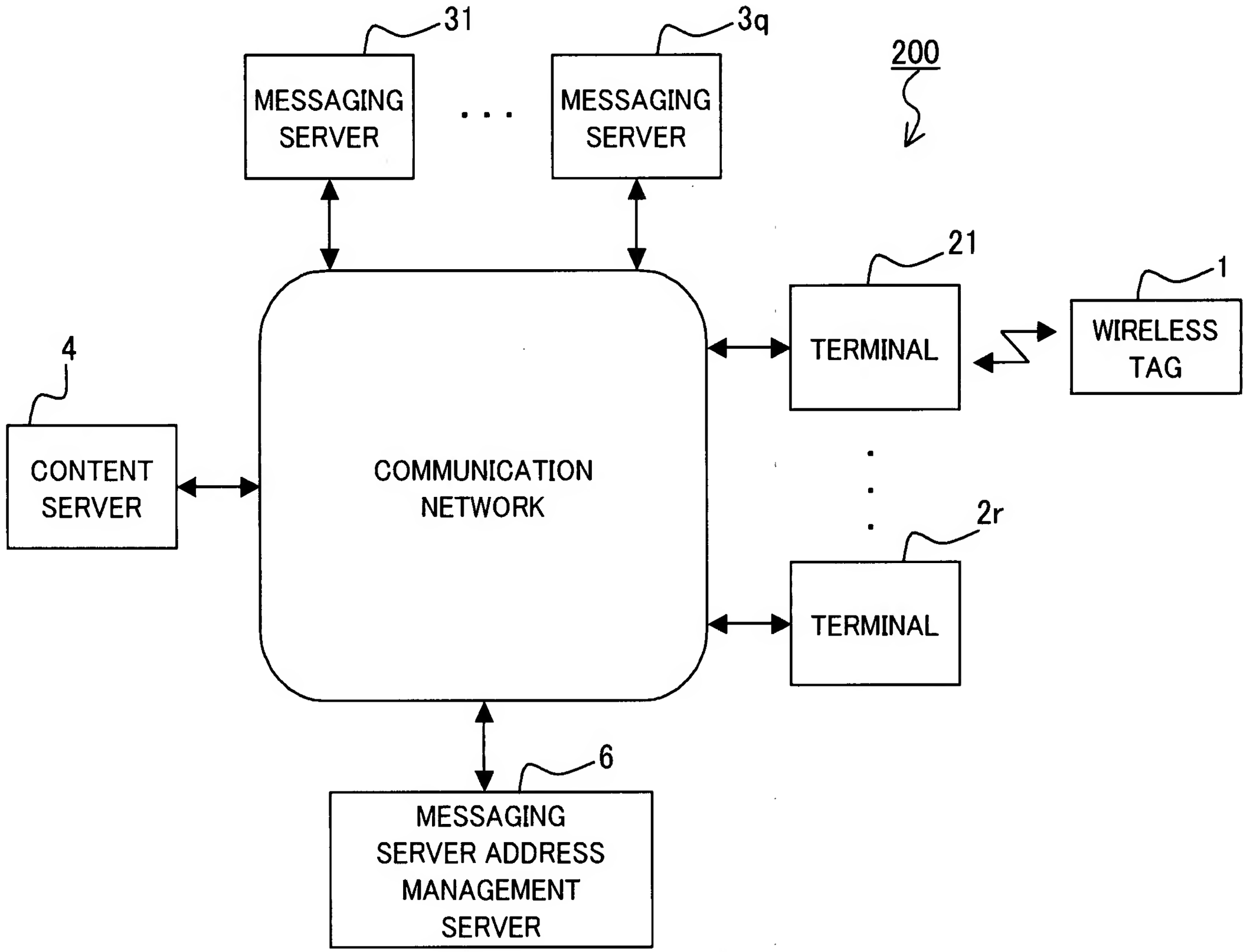

31
3q
200
MESSAGING SERVER
MESSAGING SERVER
21
1
4
TERMINAL
WIRELESS TAG
CONTENT SERVER
COMMUNICATION NETWORK
2r
TERMINAL
6
MESSAGING SERVER ADDRESS MANAGEMENT SERVER

FIG. 19

USER ID	MESSAGING SERVER ADDRESS
USER A	MA
USER B	MB
.	.
.	.
.	.

FIG. 20

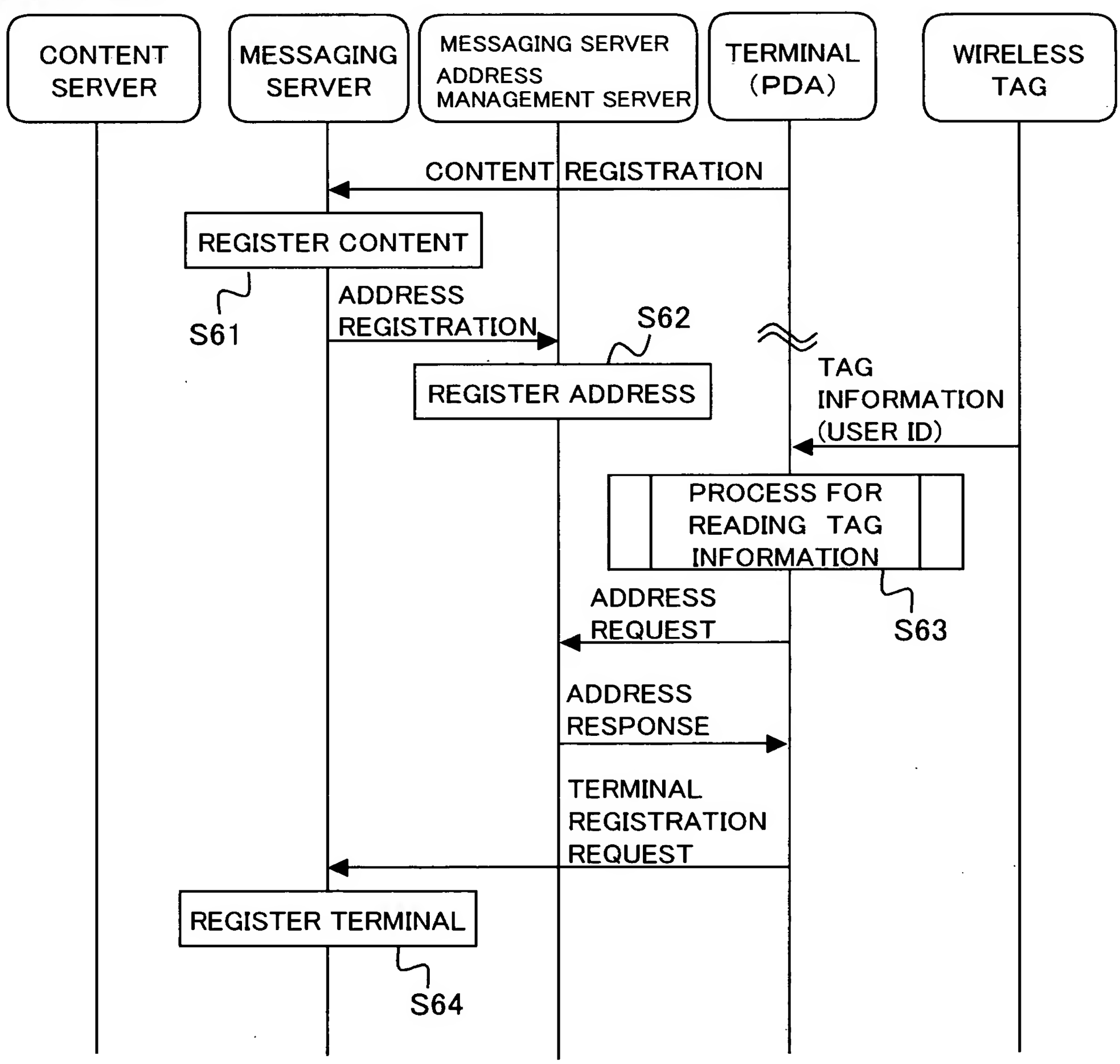


FIG. 21

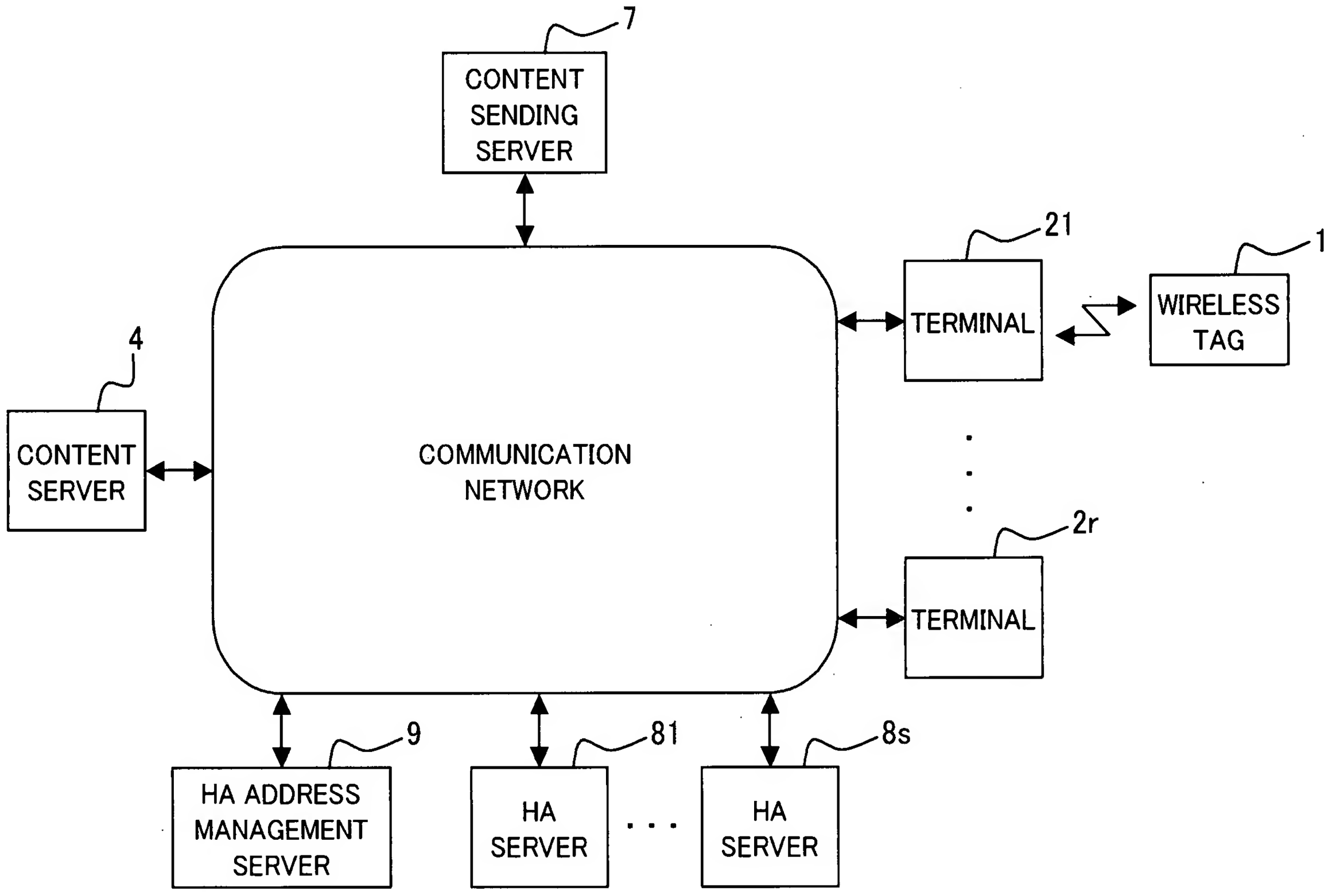

7
CONTENT SENDING SERVER
21
1
TERMINAL
WIRELESS TAG
4
CONTENT SERVER
COMMUNICATION NETWORK
2r
TERMINAL
9
81
8s
HA ADDRESS MANAGEMENT SERVER
HA SERVER
HA SERVER

FIG. 22

USER ID: USER A

CONTENT ADDRESS (URL)	DELIVERY TRIGGER	UPDATED TIME	DELIVERY CONDITION
http://www.stock.com/z.html	UPDATE		—
⋮	⋮	⋮	⋮

FIG. 23

USER ID: USER A

TERMIANL ID	TERMINAL ADDRESS	CONTENT FORMAT	DELIVERY MODE	DELIVERY COUNT
T1	A1	TEXT	SINGLE	0

FIG. 24

USER ID	HA ADDRESS
USER A	HA1
⋮	⋮

FIG. 25

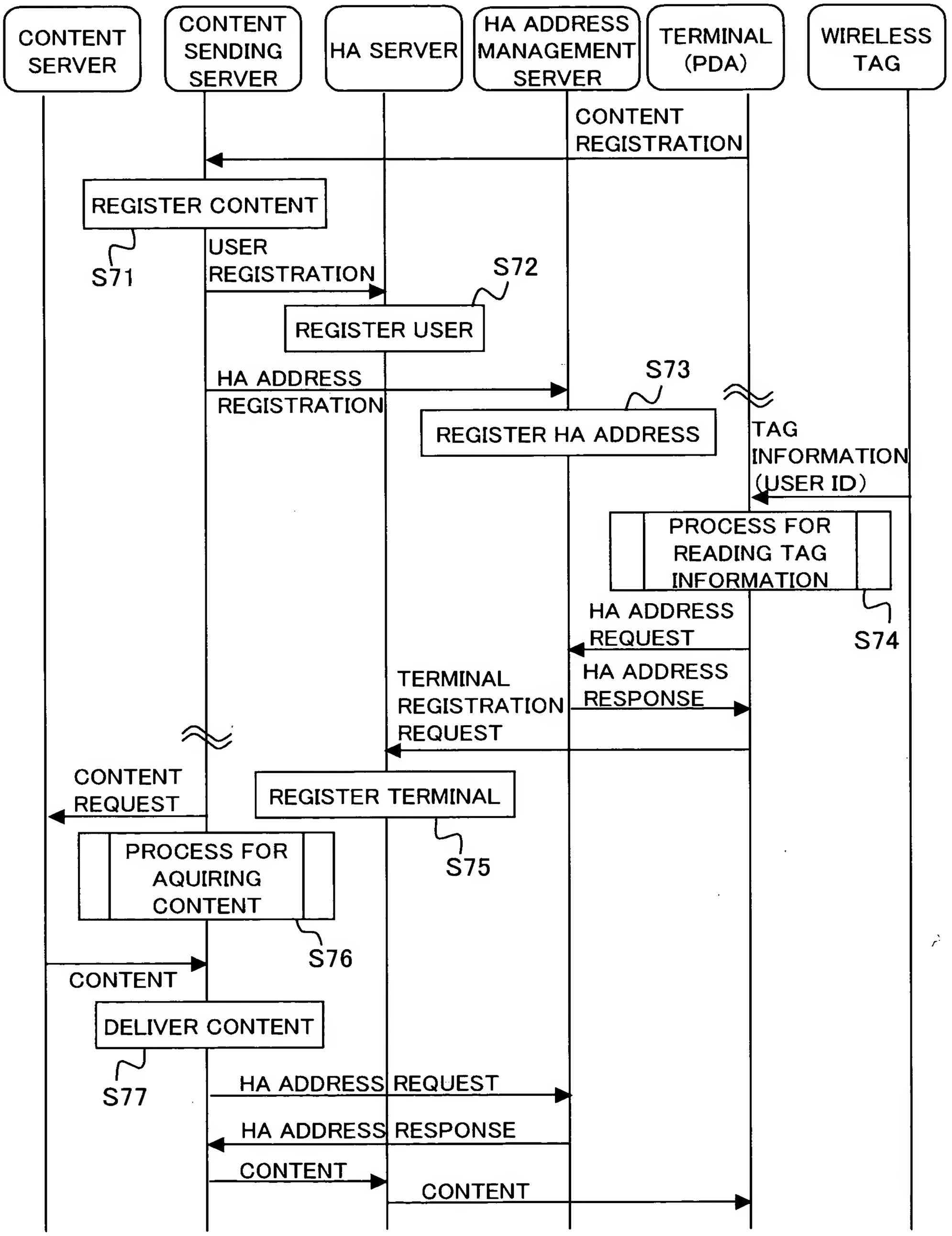
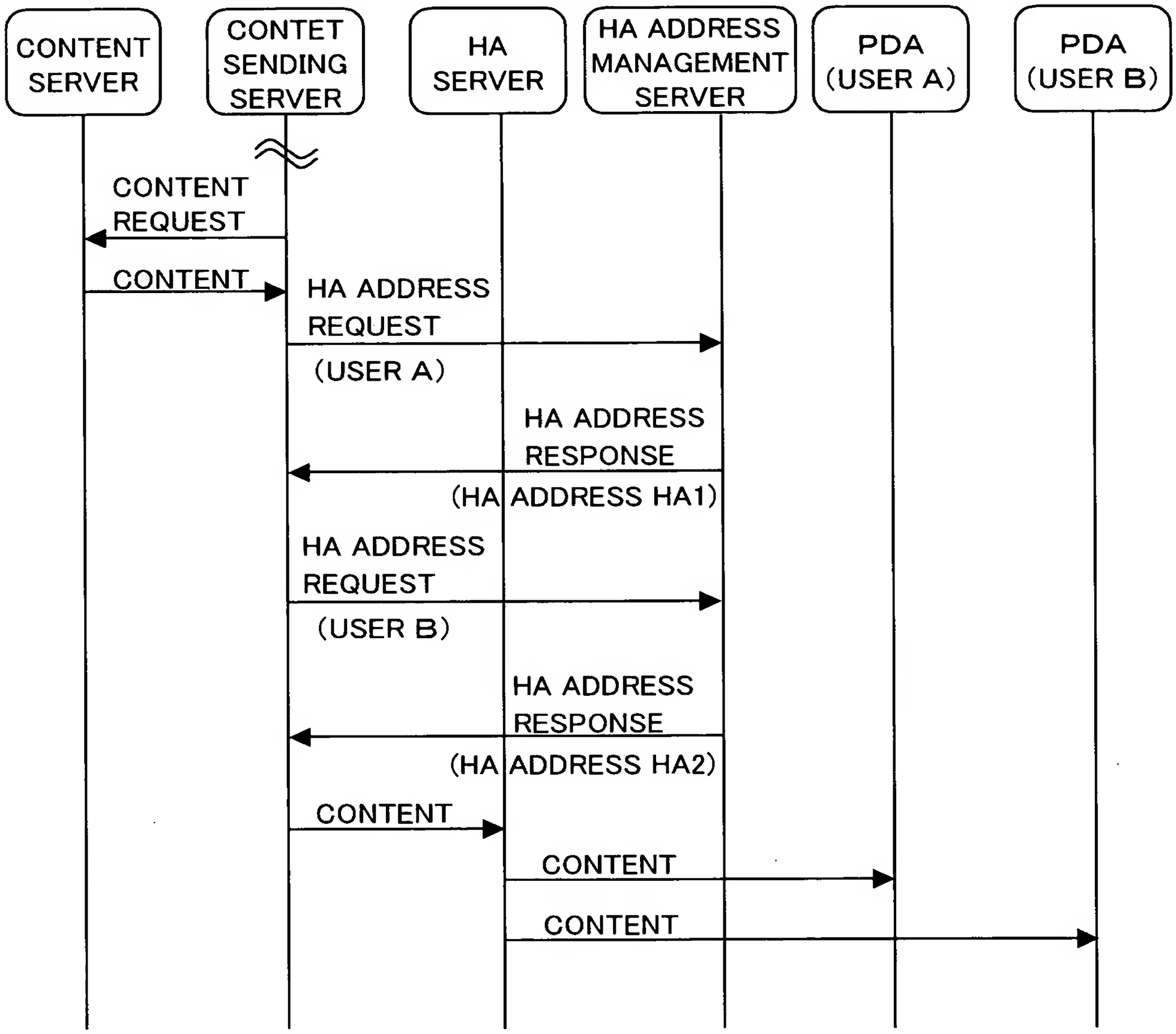

CONTENT SERVER
CONTENT SENDING SERVER
HA SERVER
HA ADDRESS MANAGEMENT SERVER
TERMINAL (PDA)
WIRELESS TAG
CONTENT REGISTRATION
REGISTER CONTENT
S71
USER REGISTRATION
S72
REGISTER USER
HA ADDRESS REGISTRATION
S73
REGISTER HA ADDRESS
TAG INFORMATION (USER ID)
PROCESS FOR READING TAG INFORMATION
S74
HA ADDRESS REQUEST
HA ADDRESS RESPONSE
TERMINAL REGISTRATION REQUEST
CONTENT REQUEST
REGISTER TERMINAL
S75
PROCESS FOR AQUIRING CONTENT
S76
CONTENT
DELIVER CONTENT
S77
HA ADDRESS REQUEST
HA ADDRESS RESPONSE
CONTENT
CONTENT

FIG. 26


CONTENT SERVER
CONTET SENDING SERVER
HA SERVER
HA ADDRESS MANAGEMENT SERVER
PDA (USER A)
PDA (USER B)
CONTENT REQUEST
CONTENT
HA ADDRESS REQUEST
(USER A)
HA ADDRESS RESPONSE
(HA ADDRESS HA1)
HA ADDRESS REQUEST
(USER B)
HA ADDRESS RESPONSE
(HA ADDRESS HA2)
CONTENT
CONTENT
CONTENT